

Application No.: 09/581,004
Amendment dated: July 8, 2004
Reply to Office Action of: April 9, 2004

MTS-3200US

Remarks/Arguments:

Claims 1-40 are pending. 1-40 stand rejected.

Claims 41-42 are newly added.

Certified Copies of Priority Documents

This application is a U.S. National Phase Application of PCT International Application PCT/JP99/05509.

In the Office Action Summary, the Examiner has not acknowledged receiving certified copies of the priority documents. In the Notice of Acceptance of Application dated August 10, 2000, by the USPTO as a designated office, the certified copies were listed as received. Applicants respectfully request that the Examiner acknowledge receipt of such documents.

Section 102 Rejections

Independent claims 1, 37 and 40 have been rejected as being anticipated by Shimizu. Applicants respectfully submit that this rejection is overcome for the reasons set forth below.

Amended claim 37 now includes features which are not suggested by the cited reference, namely:

- (c) generating a synthetic image of the vehicle by superimposing an assumed-movement pattern of the vehicle ...,
- wherein **the assumed movement pattern of the vehicle is a future movement of the**

**vehicle from a current position of the
vehicle ...**

Assumed movement patterns are shown, for example, in Fig. 11.

Each assumed movement pattern is a movement from a current position of the vehicle to a future movement of the vehicle. For example, as shown in Fig. 9, an assumed movement pattern includes current position of the vehicle 901, start position of the vehicle 903 and target parking position of the vehicle 902. As another example, Fig. 8 shows an assumed movement pattern of the vehicle between start position 801 and parking position 802, and shows tire traces 603 as an optimized movement pattern for the vehicle so that it is properly parked.

An advantage of the present invention is that the synthetic image includes a graphical expression providing information on how to move a vehicle between a current position and a future position (for example, tire traces). The user may view the still graphical expression, while the vehicle is moving from the current position to the future position. He may readily assess his performance.

It will be appreciated that the assumed movement pattern is a still graphical expression and does not move. For example, the tire tracks of the vehicle do not change, after they have been selected. The user compares his performance throughout the route against the still tire tracks (the assumed movement pattern).

Shimizu discloses a synthetic image generator for generating a superimposed image with respect to a user's viewpoint. The Office Action states that Shimizu discloses an assumed movement pattern as a video showing movement of the vehicle in performing a predetermined series of driving operations.

Applicants respectfully submit that Shimizu does **not** suggest generating a synthetic image of the vehicle where the assumed movement pattern of the vehicle is **a future movement of the vehicle from a current position of the vehicle**. Fig. 7 of Shimizu includes car position estimating unit 241 which only calculates **a current position of a vehicle**, based on the past history of the user's performance, as monitored by control equipment 230. Shimizu only suggests displaying the current position of the vehicle and **cannot** display an assumed movement pattern of the vehicle showing several positions of the vehicle, from the present position to the future position.

Applicants further submit that Shimizu discloses only a current position of a vehicle and does **not** disclose a future position of the vehicle, because the output of car position estimating unit 241 of Fig. 7 is inputted to camera position calculating unit 242. Camera position calculating unit 242 calculates a CG image and provides only the current position of the camera. It does **not** calculate any future movement pattern of the vehicle. Accordingly, Shimizu does **not** suggest providing an assumed movement

pattern of the vehicle, which is **a future movement of the vehicle from a current position of the vehicle.**

Although not the same, claims 1 and 40 have been amended to include features similar to amended claim 37. These claims are, therefore, not subject to rejection in view of the cited reference for the same reasons set forth for amended claim 37.

Dependent claims 2-36 and 38-39 are not subject to rejection in view of the cited reference for at least the same reasons set forth for amended claim 37. Favorable reconsideration is respectfully requested.

Newly Added Claims 41-42

Newly added claim 41 recites the following features:

- generating a synthetic image of the vehicle by superimposing an assumed-movement pattern of the vehicle with respect to the circumferential state image,
- wherein **the assumed-movement pattern of the vehicle is an optimized movement for the vehicle between start and end positions of the vehicle...**

As shown, for example, in Fig. 7, the assumed-movement pattern includes the tire traces of the vehicle (503), showing the optimized movement between the start and end positions of the vehicle.

This assumed-movement pattern for the vehicle advantageously provides the optimal path for the vehicle between the start and end positions of the vehicle, so that the user may optimally steer his vehicle along the tire traces (for example).

Shimizu, on the other hand, discloses, for example in Figs. 10B-10E, only current positions of the vehicle as viewed from a CG of the user, based on steering control commands provided to the vehicle by the user. Shimizu does **not** suggest an assumed-movement pattern of the vehicle, which is **an optimized movement for the vehicle between start and end positions of the vehicle**. Favorable consideration is requested.

Newly added claim 42 further limits claim 41 by reciting "generating a further synthetic image of the vehicle by superimposing the further assumed-movement pattern of the vehicle with respect to the circumferential state image, ... wherein the further assumed-movement pattern of the vehicle is **an optimized movement for the vehicle between the new and the end positions of the vehicle....**".

As discussed above, Shimizu does not suggest an assumed movement pattern of the vehicle which shows an optimized movement for the vehicle between the new and the end positions of the vehicle.

Favorable consideration is requested for claim 42.

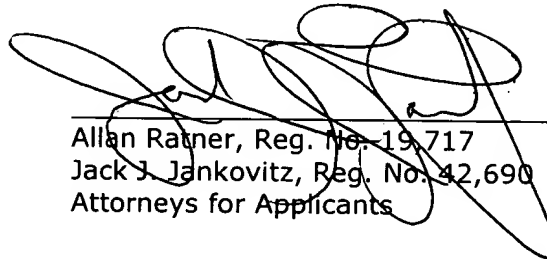
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CONCLUSION

Claims 1-42 are in condition for allowance.

Respectfully submitted,



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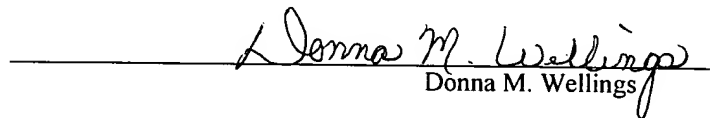
JJJ/dmw

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